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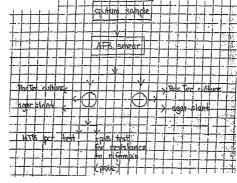




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(\$4) Thie: METHOD AND KIT FOR THE CHARACTERIZATION OF ANTIBIOTIC-RESISTANCE MUTATIONS IN MYCOBACTERIUM TUBERCULOSIS Abstract				
The Amplification and Office sequencing primer sets have been developed for the detection and analysis of ambibiotic resistance-associated mutations in defined regions of the rpoB (rifampin), katG			sputum sangle	
(isoniazid), oxyR-ahpC PR (isoniazid), mabA (isoniazid),	++	-	AFB smear	++++

rpsL/s12 (streptomycin), 16S/rrs (streptomycin), embB (ethambutol), pncA (pyrazi-namide), gyrA (ciprofloxacin) and 238 (azithromycin) of Mycobacterium These primers genes tuberulosis. can be used in a method for detection and characterization of Mycobacterium tuberculosis present in a sample. The method includes the steps of obtaining a sputum sample suspected of containing M. tuberculosis, performing a first sequencing procedure, with or without prior amplification, on the sample to detect the presence of M. tuberculosis. and if present to evaluate the



rpoB, katG, rpsLs12 and 23S genes for the presence of antibiotic-resistance inducing mutations; and (c) if M. uberculosis is detected in step (b), performing a second sequencing procedure, with or without prior amplification, on the sample to evaluate the additional genes for the presence of antibiotic-resistance inducing mutations.